

Student Academic Procrastination? *Self Esteem*, Motivation for Achievement, and Learning Style

Rischa Pramudia Trisnani ¹, Dahlia Novarianing Asri ²

¹ Universitas PGRI Madiun, Indonesia; pramudiarischa@unipma.ac.id

² Universitas PGRI Madiun, Indonesia; pramudiarischa@unipma.ac.id

Received: 21/06/2024

Revised: 25/09/2024

Accepted: 07/11/2024

Abstract

Academic procrastination is a tendency to avoid or postpone academic tasks that students often carry out. Many factors cause academic procrastination, including internal and external factors. This study aims to determine the correlation between self-esteem, achievement motivation, and learning style on students' academic procrastination. This study uses quantitative research with a correlational study design. The population of this study is active students of PGRI Madiun University. The sampling technique used *was proportional random sampling, and a sample of 586 students was obtained*. The data collection technique uses a psychological scale with a Likert Scale model with alternative answers: Strongly Agree, Agree, Disagree, and Strongly Disagree. The self-esteem scale consists of 23 items, the achievement motivation scale consists of 12 items, the learning style scale consists of 30 items and the academic procrastination scale consists of 31 items. The data analysis technique uses product-moment correlation with the help of SPSS 29. The study results showed a significant correlation between self-esteem, achievement motivation, and learning style with academic procrastination.

Keywords

Self Esteem; achievement motivation; learning style; academic procrastination

Corresponding Author

Rischa Pramudia Trisnani

Universitas PGRI Madiun, Indonesia; pramudiarischa@unipma.ac.id

1. INTRODUCTION

An individual's ability to possess the knowledge and skills necessary for social and individual development, also called today's competence, is closely related to their awareness of the responsibility to learn. Learning responsibility is a concept that cannot be limited only to the beginning and implementation of learning tasks (Gündüz, 2020). Procrastination has become one of the most frequent problems in the student environment. The general tendency to procrastinate on academic assignments is a common thing for them (Balkis, 2014). Academic procrastination is caused by internal conditions such as cognitive and emotional, which are one of the personality traits. Still, external conditions such as motivation, surrounding environment, and discomfort can also trigger the emergence of these behaviors (Zacks & Hen, 2018). Based on research conducted by (Afzal & Jami, 2018), Two factors affect academic procrastination. The main factor is "Fear of Failure" (evaluation anxiety, perfectionism, and lack of confidence), and the second factor is "Task Aversion" (task aversion and laziness). Moreover (Quispe-Bendezú et al., 2020) stated that students procrastinate academically because they prefer to do other fun activities that will cause satisfaction. A person who delays academic activities and takes a long



time before starting a task due to a functional mismatch tends to start their work but do it voluntarily, preferring to work under pressure. Other emerging factors are dependence, risk-taking, low self-esteem, self-control, and assertiveness.

In education, self-esteem rests on students' assessment of their potential to achieve academic success. In these situations, self-esteem can be high, medium, and low. High self-esteem describes students who have a positive perception of academic excellence in subjects. Moderate self-esteem describes students who have a carefree view of their academics. At this level of self-esteem, students are willing to accept any grade above failure. On the other hand, low self-esteem describes students with a negative perception of achieving academic excellence in subjects (Onokpaunu & Okoye, 2020). Individuals with high self-esteem and resilience will complete their tasks quickly without delay (Akin & Radford, 2018); consistently high self-esteem can develop skills, establish good relationships with the environment, and improve competence (Galante & Ward, 2017). Self-esteem refers to a belief in one's worth or ability. High levels of self-esteem are related to a person's judgment and decision-making of a person (Johnson et al., 2020). (Anggrawan, 2019) argues that individuals with high self-esteem can present something preferred, including in determining learning styles. According to Masoumi (Masoumi, 2023), learning style is a way to emphasize some learning abilities above others. He believes public awareness of the consequences of their learning styles and other available learning methods has advantages for students. Students have many individual differences and diverse learning methods, so knowing their learning styles can play an important role in their learning and academic success. The advantage of learning style identification is that it provides information about learning strategies and teaching methods appropriate to that style (Ku, 2008; Ling dan Hsiu, 2010). On the one hand, knowing the variables that cause academic procrastination improves the prevention of failures in college and creates a pleasant learning environment. On the other hand, it can help find the right methods and rely on practical priorities. As part of the education system, students have certain demographic and psychological characteristics. Determining the learning style is crucial in supporting maximum learning outcomes (Nugraheni & Pangaribuan, 2006). In addition, students' learning styles are closely related to achievement motivation and academic self-efficacy. Those who have a pessimistic mindset and those who have an optimistic approach are more effective, more desired, stronger, and more energetic in facing problems (Kaplan & Güngörmüş, 2022). Students will find it easier to motivate themselves if they have found a learning style that suits them (Sari, 2014). Motivation provides an important foundation for complementing cognitive behaviors, such as planning, organizing, decision-making, learning, and assessment (Singh, 2011). A person's motivation tends to improve their achievement, while achievement motivation positively affects academic performance (Affum-osei et al., 2014). Students with high achievement motivation will learn more in-depth, be more self-organized according to an effective learning style according to their abilities, and have confidence that they can perform the task well (Affum-osei et al., 2014).

Theoretical Foundations

Self-Esteem

(Lohbeck & Petermann, 2018) Self-esteem is defined as a person's evaluation of himself. (van Aalst et al., 2021) Self-esteem refers to subjective judgments about oneself related to the perception of one's behavior and performance in front of others, including the perception of evaluation from others. (Cvencek et al., 2018) It is said that self-esteem and motivation affect students' academic performance. (Akin & Radford, 2018) She added that the learning environment affects students' self-esteem and resilience in shaping learning behavior. A person's high self-esteem can cause good learning behavior and tend not to procrastinate on assignments.

Motivation for Achievement

(SINGH, 2011) Achievement motivation is a subjective and internal psychological impulse that allows individuals to pursue work that they find valuable and motivates them to achieve their goals.

(Affum-osei et al., 2014) Mentioned that achievement motivation has a positive effect on academic performance. (Busato et al., 2000) It also mentions that Achievement Motivation is related to extraversion, awareness, friendliness, and openness to experience. (Partovi & Razavi, 2019) Factors that affect achievement motivation are the situation or environment and external stimuli, a person's internal state, clarity of goals and directions, and appropriate learning behaviors to achieve goals.

Learning Style

(Rasheed & Wahid, 2021) Mention that learning style is the preferred way of using one's ability to learn. (Shamsuddin & Kaur, 2020) Defines learning styles as a combination of cognitive, emotional, and psychological aspects of the learning environment and how they interact and respond to the environment. (Hernández-torrano et al., 2017) Also, learning style refers to "the preferred way in which individuals collect, organize, and think about information.

Academic Procrastination

(Afzal & Jami, 2018) View procrastination as the tendency to postpone or completely avoid an activity under one's control to achieve a goal. (Hen & Goroshit, 2020) It also mentions that academic procrastination is a type of detailed procrastination behavior, defined as behavior that deliberately delays learning-related actions. (Karimi Moonaghi & Baloochi Beydokhti, 2017) Factors that affect academic procrastination are individual characteristics, personality, age, gender, education, motivation, interests, fear of failure, and perfectionism.

Previous Research

(Zhang et al., 2018) His research stated that increasing self-efficacy for self-regulation and eliminating the fear of failure can prevent or reduce academic procrastination among healthy students, especially those with low self-esteem. (Khorsidi et al., 2019) In his research, he also stated that a decrease in academic procrastination and an increase *in locus of control* can increase the motivation to excel in students. The tendency of students to carry out academic procrastination other than those mentioned in the research above, In research (Gündüz, 2020), Academic procrastination behavior also affects students' learning styles and parenting behavior. (Visser et al., 2018) Argue that the many factors that cause procrastination behavior among students cause their low academic achievement.

Conceptual Framework

One of the factors related to academic failure is academic procrastination. Academic procrastination is common among students. The number of students who do academic procrastination apart from the laziness factor is also many other factors. How a person can assess himself also affects the student's desire not to delay. A person with high self-esteem tends to have high motivation for achievement to complete the task at hand confidently. In addition to self-esteem and motivation to achieve, learning style also affects a person's behavior in completing a job.

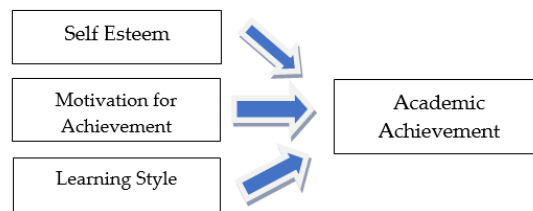


Figure 1. Conceptual Framework of the Research

2. METHODS

This study uses a quantitative method to test the influence of self-esteem, achievement motivation, learning style, and academic procrastination. The research sample consisted of all students at PGRI

Madiun University, and it amounted to 586 respondents. The sampling technique uses non-probability with the type of cluster sampling. The data sources used by the researcher are primary and secondary, while the data used is primary data in the form of respondents' answers presented in the questionnaire. Before the analysis was carried out, the research used an instrument test. The instruments used in this study are self-esteem, motivation for achievement, learning style, and academic procrastination. Data analysis uses multiple partial regression analysis by prioritizing the research aspect on Significance and t-test values.

3. FINDINGS AND DISCUSSIONS

Result in

Respondent description

The description of the research respondents was explained based on the study program and faculty of the respondents. More details can be seen in Table 1.

Table 1. Description of the research respondents

Faculty	Program Studi	f	%
Faculty of Teacher Training and Education (FKIP)	PGSD	64	11,3
	PG PAUD	30	5,1
	Guidance and Counseling	98	16,7
	Mathematics Education	23	3,9
	Biology Education	6	1,02
	Economics Education	34	5,8
	Indonesian Language and Sanstra Education	20	3,4
	English Language Education	13	2,2
	Accounting Education	23	3,9
	History Education	13	2,2
	Physics Education	7	1,2
Faculty of Economics and Business (FEB)	Management	82	13,9
	Accountancy	49	8,3
	Tax Management	10	1,7
Fakultas Teknik	Informatics Engineering	42	7,1
	Industrial Engineering	13	2,2
	Electrical Engineering	6	1,02
	Chemical Engineering	8	1,4
Faculty of Law	Law Study Program	18	3,07
Faculty of Health Sciences and Sciences (FKIP)	Sports Science	12	2,04
	Pharmacy	15	2,6

Source: primary data, 2022 processed

From the description of Table 1, it is explained that the respondents from the Faculty of Teacher Training and Education amounted to 331 students, while from the Faculty of Economics and Business

amounted to 141 students, the Faculty of Engineering amounted to 69 students, the Faculty of Law amounted to 18 students and the Faculty of Health Sciences and Sciences amounted to 27 students. This proves that the respondents are students dominated by the Faculty of Teacher Training and Education, as much as 56.5 percent.

Classical assumption test

a. Normality test

Based on table 3. From the last image above, it is known that the results of the Kolmogorov Smirnov Test scores are 0.120, 0,134, 0,065, and 0.089. These values are all **greater** than 0.05, meaning the data from all variables is normally distributed. It was explained that all answers were distributed normally so that it could explain the data obtained from the respondents so that they could continue to the next test. More details can be found in the table 2;

One-Sample Kolmogorov-Smirnov Test

		Self-esteem	Motivation for Achievement	Learning Style	Academic Procrastination
N		586	586	586	586
Normal Parameters ^{a,b}	Mean	27.8635	35.7901	43.0802	45.1468
	Std. Deviation	2.96621	4.31519	5.33417	4.79376
Most Extreme Differences	Absolute	.120	.134	.065	.089
	Positive	.120	.134	.054	.089
	Negative	-.111	-.091	-.065	-.078
Test Statistic		.120	.134	.065	.089
Asymp. Sig. (2-tailed)		.000 ^c	.000 ^c	.000 ^c	.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

b. Heteroskedasticity test

The heteroscedasticity test aims to test whether, in the regression model, there is a variance inequality from the residual of one observation to another. A good regression is a regression in a position of homoscedasticity and not a condition of heteroscedasticity. The variable is expressed in a position where heteroscedasticity does not occur if the distribution of observer points above and below zero on the Y-axis leads to an unclear pattern (Hair et al., 2017:174). For more details, you can see in the figure 2.

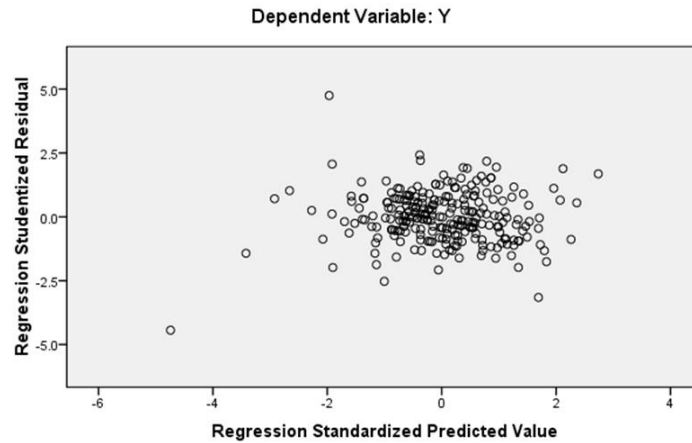


Figure 2. Heteroskedastiness Test Results

Based on the output of the Scatterplot in Figure 1 above, it can be seen that the dots are spreading out and not forming a specific, clear pattern. So, it can be concluded that there is no heteroscedasticity problem in this study. This means that the data in this study is homoscedasticity.

c. Autokorelasi test

The autocorrelation assumption test aims to test whether, in a linear regression model, there is a correlation between the per turbulent error in the t-period and the perturbator error in the t-1 period (Hair et al., 2017:241). To diagnose the existence of autocorrelation in a regression model, tests are carried out on the test value Durbin-Watson (Uji Dw). Untuk lebih jelasnya maka dapat dilihat pada tabel 4.

Tabel 3. Hasil uji autokorelasi

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.407 ^a	.165	.161	4.391	1.818

a. Predictors: (Constant), Learning Style, Motivation for Achievement, Self-esteem

b. Dependent Variable: Academic Procrastination

Primary Data Source, 2022 processed.

Based on the output table "Model Summary" above, it is known that the Durbin-Watson value (d) is 1.818. Furthermore, we will compare this value with the value of the Durbin-Watson table at a significance of 5% with the formula (k; N). The number of independent variables is 3 or "k" = 3, while the number of samples or "N" = 586, then (k; N) = (3; 586). We then look at the distribution of the values of the Durbin-Watson table. So, it was found that the dL value was 1.613 and the dU was 1.736.

The Durbin-Watson value (d) is 1.671 from the upper limit (dU), which is 1.613 greater than the limit (dU), which is 1.736 less than (4-du) 4-1, 736 = 2.264. Therefore, as the basis for decision-making in the Watson-Durbin test above, it can be concluded that there are no problems or symptoms of autocorrelation. Thus, multiple linear regression analysis for the above research hypothesis test can be carried out or continued.

d. Multicollinearity test

The multicollinearity test tests whether the regression model finds a correlation between independent variables. If there is a symptom of multicollinearity, the regression model becomes bad

because several variables will produce similar parameters so that they can interfere. The detection of multicollinearity problems can be seen from the variance inflation Factor (VIF) value. A multicollinearity symptom exists if the VIF value is less than 10. Conversely, if the VIF value is more than ten and the tolerance value is more than 0.10, no multicollinearity symptom exists.

Table 4. Multicollinearity Test Results

Model		Coefficients			t	Sig.	Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients			Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	22.930	2.225		10.304	.000		
	Self-esteem	.396	.066	.245	5.988	.000	.858	1.166
	Motivasi Berprestasi	.066	.043	.060	1.532	.126	.942	1.062
	Gaya Belajar	.205	.037	.228	5.593	.000	.866	1.155

a. Dependent Variable: Academic Procrastination

Based on the output table "coefficients" in the "Collinearity Statistics" section, it is known that the Tolerance value for the variables Self Esteem (X1), Achievement Motivation (X2), and Learning Style (X3) is 0.858 greater than 0.10. Meanwhile, the VIF value for variable self-esteem is $1.166 < 10.00$. Therefore, referring to the basis for decision-making in the multicollinearity test, it can be concluded that there is no multicollinearity symptom in the regression model.

The results of the classical assumption test explained that all the tests carried out by the study explained that in general normal data, there was no heteroskedasticity, no autocorrelation, and no multicollinearity so that the research could be continued in the next analysis, namely regression analysis.

Regression Analysis Results

a. The effect of self-esteem on academic procrastination

Based on the calculation of R-Square, it shows 0.113 or equal to 11.3%. This means that the variable self-esteem affects academic procrastination by 11.3%, while other factors influence 88.7%, while in the F test, the sig value is 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that self-esteem significantly affects academic procrastination.

Table 5. Description of self-esteem regression towards academic procrastination

Model		Coefficients			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	18.465	1.095		16.867	.000
	Y	.208	.024	.336	8.634	.000

a. Dependent Variable: X1

b. The effect of achievement motivation on academic procrastination

Based on R-Square calculations, it shows 0.023 or equal to 23%. This means that the motivation variable for achievement affects academic procrastination by 23%, while other factors influence 77% in the F test. The sig value is 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that achievement motivation significantly affects academic procrastination.

Table 6. Description of achievement motivation regression against academic procrastination

		Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29.570	1.671		17.694	.000
	Y	.138	.037	.153	3.743	.000

a. Dependent Variable: X2

c. The influence of learning style on academic procrastination

Based on the calculation of R-Square, it shows 0.105 or equal to 10.5%. This means that the learning style variable affects academic procrastination by 10.5%, while other factors influence 89.5%, while the F test has a sig value of 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that learning style significantly affects academic procrastination.

Tabel 7. Deskripsi regresi gaya belajar terhadap prokrastinasi akademik

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	26.809	1.978		13.555	.000
	Y	.360	.044	.324	8.273	.000

a. Dependent Variable: X3

d. The Influence of Self-esteem and Achievement Motivation on Academic Procrastination

Based on R-Square calculations, it shows 0.120 or equal to 12%. This means that the variables of self-esteem and motivation for achievement affect academic procrastination by 12%. In comparison, other factors influence 88%, while in the F test, the sig value is 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that self-esteem and achievement motivation have a significant effect on academic procrastination

Table 8. Description of self-esteem regression and achievement motivation towards academic procrastination
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	27.359	2.133		12.825	.000
Self-esteem	.515	.064	.318	8.018	.000
Motivasi Berprestasi	.096	.044	.087	2.185	.029

a. Dependent Variable: Prokrastinasi Akademik

e. The influence of achievement motivation and learning style on academic procrastination

Based on the calculation of R-Square, it shows 0.114 or equal to 11.4%. This means that achievement motivation and learning style affect academic procrastination by 11.4%, while other factors influence 88.6%, while in the F test, the sig value is 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that achievement motivation and learning style significantly affect academic procrastination.

Table 9. Description of Regression of Achievement Motivation and Learning style on academic procrastination
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	29.476	1.996		14.770	.000
Motivasi Berprestasi	.107	.044	.096	2.424	.016
Gaya Belajar	.275	.036	.306	7.712	.000

a. Dependent Variable: Prokrastinasi Akademik

f. The influence of self-esteem, achievement motivation, and learning style on academic procrastination

Based on R-Square calculations, it shows 0.165 or equal to 16.5%. This means that self-esteem, motivation for achievement, and learning style affect academic procrastination by 16.5%, while other factors influence 83.5%, while the F test has a sig value of 0.000. Because the GIS value is $0.000 < 0.05$, it can be concluded that self-esteem, achievement motivation, and learning style significantly affect academic procrastination.

Table 10. Description of self-esteem regression, achievement motivation and learning styles toward academic procrastination
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	22.930	2.225		10.304	.000
Motivasi Berprestasi	.066	.043	.060	1.532	.126
Gaya Belajar	.205	.037	.228	5.593	.000
Self-esteem	.396	.066	.245	5.988	.000

a. Dependent Variable: Prokrastinasi Akademik

Discussion

The Effect of Self-Esteem on Academic Procrastination

Research conducted by (Muyana, 2018) Data was obtained that the academic procrastination of students is still relatively high, which is 81%, because they are worried about their ability to be assessed, fear of failure and difficulty in making decisions, or because they need the help of others in doing their work. (Yang et al., 2021) Low self-esteem is generally conceptualized as a personality factor associated with a fear of failure. In particular, individuals with low self-esteem have lower confidence in their ability to complete tasks because they fear the negative effects of failure, which can lead to an inability to start tasks. (Hernández et al., 2020) It also mentions that self-esteem is understood as how a person feels about themselves, so it causes students to procrastinate because they cannot develop effective time management. A higher level of self-esteem is considered as the self-perception of one's competence and values. Individuals with high self-esteem have been shown to show decreased reactions to depression, suicidal thoughts, and emotional stress. High self-esteem is also associated with improved performance and better academic outcomes (Brando-Garrido et al., 2020).

The Effect of Achievement Motivation on Academic Procrastination

A psychodynamic explains why we postpone executing tasks (especially important ones) with other, more fun, or less important tasks. It is acceptable that procrastination is a disposition that has emotional and cognitive roots. However, research on this subject in the last decade has mainly focused on development based on achievement motivation, given that procrastination may be a behavior caused by whether or not a person likes to do a certain activity (Brando-Garrido et al., 2020).

(Klibert et al., 2011) It is mentioned that achievement motivation is related to maladaptive thoughts and behaviors, tends to have a strong desire to pursue success in learning, and tends to procrastinate in completing tasks. Research conducted (Ebadi & Shakoorzadeh, 2015) The characteristics of people with high achievement motivation will always improve their performance well, have responsibility, and not academic procrastination. Another study said that in 302 respondents, 65% of academic procrastination was due to motivation to achieve, self-regulation, and low confidence. (Abassi & Darahi, 2014). Other similar research says that low academic procrastination in students can increase motivation to excel. (Rasoli Khorsidi et al., 2019) (A. R. Fathoni, 2022).

The Influence of Learning Style on Academic Procrastination

Research (Gündüz, 2020) Learning style is an individual's preferences and characteristics that reveal how individuals perceive, interact, and react to the learning environment in the teaching-learning process. Next (Setyawan, 2014) Also, students will need help understanding the lesson if the learning style is not by learning. Students who feel bored can experience laziness in receiving lessons and doing assignments, which will cause academic procrastination. (Haryanti & Santoso, 2020). If students need to gain knowledge about learning styles, it will be easier for them to determine the appropriate learning style and apply an effective learning style according to them. As a result, students become lazy and less interested in learning a certain learning. Problems also occur when students practice learning styles outside the teacher's teaching methods. Teachers who tend to explain without holding classroom activities or discussions cause students with different learning styles to pay less attention. When students need help concentrating during learning, they will be easily encouraged not to complete the task as instructed by the teacher, which results in academic procrastination. (Wan Hussin & Mohd Matore, 2023).

The Influence of Self-esteem, Achievement Motivation, and Learning Style on Academic Procrastination

(Johnson et al., 2020) Saying that someone with low self-esteem will lead to overly obedient or rebellious behavior, making the work environment unpleasant and decreasing productivity. Research

(Nabila & Widjajanti, 2020) said that people with high self-esteem tend to think they get low grades because they lack learning, which increases motivation to get results according to what is expected. Research (Hamdani Abdi, 2021) dan (Harahap et al., 2021) said that the characteristics of a person who has the motivation to achieve are tending to dare to take risks, calculate success, like the work they do themselves, and make achievements a measure of success while (Magfiroh & Pratiwi, 2020) It is said that self-esteem is influenced by how habituation and parenting at home will encourage the emergence of achievement challenges for someone. Factors that affect motivation for achievement are internal factors, namely interests, expertise, passion, and ambition, while external factors are the standards that must be achieved.

Research (Sari, 2014) Said that the main modality of a student is to determine the right learning style because all lessons will be easy if students can receive and grasp lessons according to their learning style. A person with a high self-assessment will tend to feel that he has the competence to excel and the motivation to complete all the work well. (Septian, 2018).

4. CONCLUSION

The results of research that has been conducted on 586 students show that a higher level of self-esteem, achievement motivation, and learning style will decrease the level of academic procrastination of students, and vice versa, if the level of self-esteem, achievement motivation, and learning style of students is low, will affect academic procrastination. Thus, the research hypothesis was declared accepted.

REFERENCES

- A. R. Fathoni, and E. I. (2022). Pengaruh Self-regulated Learning dan Motivasi Berprestasi Terhadap Perilaku Prokrastinasi Akademik Siswa. *Jurnal Indonesia Sosial Sains*, 3(7), 1018–1026. <https://doi.org/10.59141/jiss.v3i07.646>
- Abassi, M., & Darahe, Sh. (2014). Role of Procrastination, Self-Regulation, and Metacognition in Predicting Students' Academic Motivation. *Bimonthly of Education Strategies in Medical Sciences*, 7(5), 273–278.
- Affum-osei, E., Adom, E. A., Barnie, J., & Forkuoh, S. K. (2014). Achievement motivation, academic self-concept and academic achievement among high school students. *European Journal of Research and Reflection in Educational Sciences*, 2(2), 24–37.
- Afzal, S., & Jami, H. (2018). Prevalence of Academic Procrastination and Reasons for Academic Procrastination in University Students. *Journal of Behavioural Sciences*, 28(1), 51.
- Akin, I., & Radford, L. (2018). Exploring The Development of Student Self-Esteem and Resilience in Urban Schools. *Contemporary Issues in Education Research (CIER)*, 11(1), 17–24. <https://doi.org/10.19030/cier.v11i1.10118>
- Anggrawan, A. (2019). Analisis Deskriptif Hasil Belajar Pembelajaran Tatap Muka dan Pembelajaran Online Menurut Gaya Belajar Mahasiswa. *MATRIK: Jurnal Manajemen, Teknik Informatika Dan Rekayasa Komputer*, 18(2), 339–346. <https://doi.org/10.30812/matrik.v18i2.411>
- Balkis, M. (2014). *Academic Efficacy as a Mediator and Moderator Variable in the Relationship Between Academic Procrastination and Academic Achievement*. September.
- Brando-Garrido, C., Montes-Hidalgo, J., Limonero, J. T., Gómez-Romero, M. J., & Tomás-Sábado, J. (2020). Relationship of academic procrastination with perceived competence, coping, self-esteem and self-efficacy in Nursing students. *Enfermería Clínica (English Edition)*, 30(6), 398–403.

<https://doi.org/10.1016/j.enfcl.2019.07.013>

- Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*, 29(6), 1057–1068. [https://doi.org/10.1016/S0191-8869\(99\)00253-6](https://doi.org/10.1016/S0191-8869(99)00253-6)
- Cvencek, D., Fryberg, S. A., Covarrubias, R., & Meltzoff, A. N. (2018). Self-Concepts, Self-Esteem, and Academic Achievement of Minority and Majority North American Elementary School Children. *Child Development*, 89(4), 1099–1109. <https://doi.org/10.1111/cdev.12802>
- Ebadi, S., & Shakoorzadeh, R. (2015). Investigation of Academic Procrastination Prevalence and Its Relationship with Academic Self-Regulation and Achievement Motivation among High-School Students in Tehran City. *International Education Studies*, 8(10), 193–199. <https://doi.org/10.5539/ies.v8n10p193>
- Galante, M., & Ward, R. M. (2017). Female student leaders: Examining transformational leadership, athletics, and self-esteem. *Personality and Individual Differences*, 106, 157–162. <https://doi.org/10.1016/j.paid.2016.11.017>
- Gündüz, G. F. (2020). *The Relationship Between Academic Procrastination Behaviors of Secondary School Students, Learning Styles and Parenting Behaviors To cite this article: The Relationship Between Academic Procrastination Behaviors of Secondary School Students, Learning S.*
- Hamdani Abdi. (2021). ESTEEM TERHADAP HASIL BELAJAR PENDIDIKAN. *Diniyah Jurnal*, 8(1), 1–26.
- Harahap, H. S., Hrp, N. A., Nasution, I. B., Harahap, A., Harahap, A., & Harahap, A. (2021). Hubungan Motivasi Berprestasi, Minat dan Perhatian Orang Tua Terhadap Kemandirian Siswa. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1133–1143.
- Haryanti, A., & Santoso, R. (2020). Prokrastinasi Akademik Pada Mahasiswa Yang Aktif Berorganisasi. *Sukma: Jurnal Penelitian Psikologi*, 1(01), 41–47.
- Hen, M., & Goroshit, M. (2020). The effects of decisional and academic procrastination on students' feelings toward academic procrastination. *Current Psychology*, 39(2), 556–563. <https://doi.org/10.1007/s12144-017-9777-3>
- Hernández, Y. C. U., Cueto, O. F. A., Shardin-Flores, N., & Luy-Montejo, C. A. (2020). Academic procrastination, self-esteem, and self-efficacy in university students: Comparative study in two Peruvian cities. *International Journal of Criminology and Sociology*, 9(January), 2474–2480. <https://doi.org/10.6000/1929-4409.2020.09.300>
- Hernández-torrano, D., Ali, S., & Chan, C. (2017). *First-year medical students' learning style preferences and their correlation with performance in different subjects within the medical course.* 1–7. <https://doi.org/10.1186/s12909-017-0965-5>
- Johnson, A. R., Jayappa, R., James, M., Kulnu, A., Kovayil, R., & Joseph, B. (2020). Do Low Self-Esteem and high stress lead to Burnout Among healthcare workers? Evidence From a Tertiary Hospital in Bangalore, India. *Safety and Health at Work*, 11(3), 347–352. <https://doi.org/10.1016/j.shaw.2020.05.009>
- Kaplan, M., & Güngörmüş, Z. (2022). Hemşirelik öğrencilerinde akademik erteleme davranışı: Akademik güdülenme, akademik özyeterlik ve akademik yükleme stillerinin rolü. *Anatolian Journal of Health Research*, Volume 3 Issue 2 (Volume 3 Issue 2), 53–59. <https://doi.org/10.29228/anatoljhr.57730>

- Karimi Moonaghi, H., & Baloochi Beydokhti, T. (2017). Academic procrastination and its characteristics: A Narrative Review. *Future of Medical Education Journal*, 7(2), 43–50. <https://doi.org/10.22038/fmej.2017.9049>
- Khorsidi, F. R., Sangni, A., & Jangi, P. (2019). *The Relationship between Academic Procrastination, Locus of Control and Achievement Motivation with Academic Achievement in Nursing Student*. 8(1). <https://doi.org/10.21859/jne-08103>
- Klibert, J., Langhinrichsen-Rohling, J., Luna, A., & Robichaux, M. (2011). Suicide proneness in college students: Relationships with gender, procrastination, and achievement motivation. *Death Studies*, 35(7), 625–645. <https://doi.org/10.1080/07481187.2011.553311>
- Lohbeck, A., & Petermann, F. (2018). Cyber victimization, self-esteem, and social relationships among German secondary school students. *Journal of School Violence*, 17(4), 472–486. <https://doi.org/10.1080/15388220.2018.1428194>
- Magfiroh, L., & Pratiwi, T. I. (2020). Hubungan Self-Esteem dan Dukungan Keluarga Dengan Motivasi Berprestasi Pada Peserta Didik Kelas VIII SMP NEGERI 30 SURABAYA. *Jurnal BK UNESA*, 11(3), 303–311.
- Masoumi, H. (2023). Investigating The Relationship Between Learning Styles with Students' Academic Procrastination. *International Journal of New Findings in Health and Educational Sciences (IJHES)*, 1(2), 104–110. <https://doi.org/10.63053/ijhes.26>
- Muyana, S. (2018). Prokrastinasi akademik dikalangan mahasiswa program studi bimbingan dan konseling. *Counsellia: Jurnal Bimbingan Dan Konseling*, 8(1), 45. <https://doi.org/10.25273/counsellia.v8i1.1868>
- Nabila, L. A., & Widjajanti, D. B. (2020). Self-esteem in mathematics learning: How can it be developed through contextual teaching and learning? *Journal of Physics: Conference Series*, 1581(1). <https://doi.org/10.1088/1742-6596/1581/1/012049>
- Nugraheni, E., & Pangaribuan, N. (2006). Gaya Belajar Dan Strategi Belajara Mahasiswa Jarak Jauh: Kasus Di Universitas Terbuka. *Jurnal Pendidikan Terbuka Dan Jarak Jauh*, 7(1), 68–82.
- Onokpaunu, M. O., & Okoye, K. R. (2020). Relationship between Self-Esteem, Academic Procrastination and Test Anxiety with Academic Achievement of Post Graduate Diploma in Education (PGDE) Students in Delta State University, Abraka. *International Scholars Journal of Arts and Social Science Research*, 3(1), 37–47.
- Partovi, T., & Razavi, M. R. (2019). The effect of game-based learning on academic achievement motivation of elementary school students. *Learning and Motivation*, 68(June), 101592. <https://doi.org/10.1016/j.lmot.2019.101592>
- Quispe-Bendezú, L. E., Araujo-Castillo, R. L., García-Tejada, J. E., García-Tejada, Y., Sprock, A. S., & Villalba-Condori, K. O. (2020). Relationship between academic procrastination and attributions of achievement motivation. *International Journal of Learning, Teaching and Educational Research*, 19(1), 188–205. <https://doi.org/10.26803/ijlter.19.1.11>
- Rasheed, F., & Wahid, A. (2021). Learning style detection in E-learning systems using machine learning techniques. *Expert Systems with Applications*, 174(September 2020), 114774. <https://doi.org/10.1016/j.eswa.2021.114774>
- Rasoli Khorsidi, F., Sangni, A., Jangi, P., Author, C., & Khorsidi, R. F. (2019). Correlations of Academic Procrastination and Locus of Control with Academic Achievement in Nursing Students: The Mediating Role of Achievement Motivation. *Scientific Journal of Nursing, Midwifery and Paramedical Faculty*, 5(2), 57–67.

- Sari, A. K. (2014). Analisis Karakteristik Gaya Belajar Vak (Visual, Auditorial, Kinestetik) Mahasiswa Pendidikan Informatika Angkatan 2014. *Eduatic - Scientific Journal of Informatics Education*, 1(1), 1–12. <https://doi.org/10.21107/edutic.v1i1.395>
- Septian, F. (2018). *Hubungan Harga Diri dan Regulasi Diri dengan Prokratinasi Akademik pada Mahasiswa Fakultas Psikologi Universitas Muhammadiyah Malang*.
- Setyawan, A. A. (2014). Pengaruh gaya belajar, prokratinasi dan fasilitas belajar terhadap prestasi belajar mahasiswa prodi pendidikan akuntansi fakultas ekonomi universitas negeri surabaya. *Jurnal Pendidikan Akuntansi*, 1–8.
- Shamsuddin, N., & Kaur, J. (2020). Does the student's learning style and ts affect blended learning matter? 9(1), 195–202. <https://doi.org/10.11591/ijere.v9i1.20422>
- Singh, K. (2011). Study of Achievement Motivation about Academic Achievement of Students. *Shared Seasoned International Journal of Topical*, 6(1), 1–12.
- van Aalst, D. A. E., Huitsing, G., Mainhard, T., Cillessen, A. H. N., & Veenstra, R. (2021). Testing how teachers' self-efficacy and student-teacher relationships moderate the association between bullying, victimization, and student self-esteem. *European Journal of Developmental Psychology*, 00(00), 1–20. <https://doi.org/10.1080/17405629.2021.1912728>
- Visser, L., Korthagen, F. A. J., Schoonenboom, J., & Loeffler, S. N. (2018). Differences in Learning Characteristics Between Students with High, Average, and Low Levels of Academic Procrastination: Students' Views on Factors Influencing Their Learning. 9(May), 1–15. <https://doi.org/10.3389/fpsyg.2018.00808>
- Wan Hussin, W. A. S., & Mohd Matore, M. E. E. (2023). The influence of learning styles on academic procrastination among students in mathematics. *Frontiers in Psychology*, 14(October). <https://doi.org/10.3389/fpsyg.2023.1239933>
- Yang, X., Liu, R. De, Ding, Y., Hong, W., & Jiang, S. (2021). The relations between academic procrastination and self-esteem in adolescents: A longitudinal study. *Current Psychology*, 19. <https://doi.org/10.1007/s12144-021-02075-x>
- Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention and Intervention in the Community*, 46(2), 117–130. <https://doi.org/10.1080/10852352.2016.1198154>
- Zhang, Y., Dong, S., Fang, W., Chai, X., & Mei, J. (2018). Self-efficacy for self-regulation and fear of failure as mediators between self-esteem and academic procrastination among undergraduates in health professions. *Advances in Health Sciences Education*, 23(4), 817–830. <https://doi.org/10.1007/s10459-018-9832-3>